This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Originial) A prosthesis for implantation within a body passage, comprising:

a plurality of expandable segments defining a circumference and a longitudinal axis, each segment including an alternating pattern of curvilinear elements extending about the circumference, the alternating pattern including a first set of curvilinear elements having a first resistance to expansion and a second set of curvilinear elements having a second resistance to expansion substantially higher than the first resistance to expansion; and

a connector extending between adjacent segments;

wherein the first and second sets of curvilinear elements comprise substantially "U" shaped elements having first and second longitudinal lengths, respectively, and wherein the second longitudinal length is substantially less than the first longitudinal length.

2. (Original) The prosthesis of claim 1, wherein each segment is expandable between a contracted condition, a first expanded condition, and a second expanded condition, the first expanded condition being achieved when a radial force exceeding the first resistance to expansion is applied to the segment, the second expanded condition being achieved when a radial force exceeding the second resistance to expansion is applied to the segment.

3. (Cancelled) The prosthesis of claim 1, wherein the first and second sets of curvilinear elements comprise substantially "U" shaped elements having first and second longitudinal lengths, respectively, and wherein the second longitudinal length is substantially less than the first longitudinal length.

4. (Amended) The prosthesis of claim 1 ~~[[3]]~~, wherein the substantially "U" shaped elements of the first and second sets of curvilinear elements are connected to one another to define a substantially sinusoidal pattern extending circumferentially along the segments, the sinusoidal pattern having an alternating amplitude defined by the first and second longitudinal lengths.

5. (Original) The prosthesis of claim 1, wherein the connector further comprises a pair of connectors located opposite one another on the circumference for facilitating articulation of the adjacent segments substantially transverse to the longitudinal axis.

6. (Original) The prosthesis of claim 1, wherein the connector includes a curve extending at least partially circumferentially along the circumference defined by the plurality of segments.

7. (Original) The prosthesis of claim 6, wherein the curve of the connector defines a sinusoidal shape adapted to extend and compress axially substantially evenly when the adjacent segments are subjected to a predetermined bending force.

8. (Canceled) An expandable stent, comprising a continuous tubular member plastically deformable between contracted and enlarged conditions and including a plurality of cylindrical segments, and a plurality of connectors extending between adjacent cylindrical segments, each cylindrical segment having an alternating circumferential pattern of curvilinear elements having different resistances to radial expansion.

9. (Canceled) The expandable stent of claim 8, wherein the circumferential pattern comprises first and second sets of "U" shaped elements having first and second longitudinal lengths, respectively, and wherein the second longitudinal length is substantially less than the first longitudinal length.

10. (Canceled) The expandable stent of claim 9, wherein the substantially "U" shaped elements are connected to one another to define a substantially sinusoidal pattern extending circumferentially along each cylindrical segment, the sinusoidal pattern having an amplitude alternatively defined by the first and second longitudinal lengths.

11. (Canceled) The expandable stent of claim 8, wherein the connector further comprises a pair of connectors located opposite one another on the circumference for facilitating articulation of the adjacent cylindrical segments about the longitudinal axis.

12. (Canceled) The expandable stent of claim 8, wherein the connector includes a curve extending at least partially circumferentially along the circumference defined by the plurality of cylindrical segments.

13. (Canceled) The expandable stent of claim 12, wherein the curve of the connector defines a sinusoidal shape adapted to extend and compress axially substantially evenly when the adjacent cylindrical segments are subjected to a predetermined bending force about the longitudinal axis.

14. (Canceled) An expandable stent, comprising:

a plurality of cylindrical segments plastically deformable between contracted and enlarged conditions and defining a circumference and a longitudinal axis; and

a connector extending between adjacent segments, each connector having a substantially sinusoidal shape extending about an axis substantially parallel to the longitudinal axis.

15. (Canceled) The expandable stent of claim 14, wherein the connector further comprises a pair of connectors located opposite one another on the circumference of the cylindrical segments, and wherein the sinusoidal shape allows opposing pairs of connectors to extend and compress axially, respectively, substantially evenly when the adjacent cylindrical segments are

subjected to a predetermined bending force about the longitudinal axis.

16. (Canceled) The expandable stent of claim 14, wherein the cylindrical segments comprise a circumferential pattern including first and second sets of "U" shaped elements having first and second longitudinal lengths, respectively, and wherein the second longitudinal length is substantially less than the first longitudinal length.

17. (Canceled) The expandable stent of claim 14, wherein the cylindrical segments include a zigzag pattern extending circumferentially about each cylindrical segment, the zigzag pattern having an amplitude alternating between by the first and second longitudinal lengths.

18. (Canceled) The expandable stent of claim 14, wherein each segment is expandable between a contracted condition, a first expanded condition, and a second expanded condition.

19. (Canceled) The expandable stent of claim 18, wherein the, cylindrical segments comprise a circumferential pattern of alternating first and second sets of curvilinear elements having alternating first and second resistances to expansion, and wherein the first expanded condition is achieved when a radial force exceeding the first resistance to expansion is applied to the cylindrical segments, and the second expanded condition is achieved when a radial force exceeding the second resistance to expansion is applied to the cylindrical segments.

20. (Canceled) A device for delivering an expandable stent to a site within a patient's body, comprising:

an elongate member having proximal and distal ends;

a nose cone on the distal end, the nose cone having a widened portion and a tapered distal tip to facilitate insertion along a body passage; and

an expandable member on the elongate member proximate to the nose cone for receiving an expandable stent thereon.

21. (Canceled) The device of claim 20, further comprising an outer sheath slidable over the elongate member, the outer sheath including a lumen for receiving the elongate member therethrough.

22. (Canceled) The device of claim 21, wherein the outer sheath includes a distal end having a diameter substantially similar to the widened portion of the nose cone.

23. (Canceled) The device of claim 21, wherein the outer sheath includes one or more perfusion holes extending between an outer surface of the outer sheath and the lumen.

24. (Canceled) The device of claim 21, wherein the outer sheath includes a tactile indicator on its outer surface proximate a distal end of the outer sheath.

25. (Canceled) The device of claim 24, wherein the tactile indicator comprises a protrusion on an outer surface of the outer sheath, the protrusion having a predetermined relationship with the expandable member when the elongate member is received within the outer sheath.

26. (Canceled) The device of claim 21, wherein the outer sheath includes an expandable dilation member proximate a distal end of the sheath for dilating a portion of a body passage.

27. (Canceled) The device of claim 20, wherein the nose cone includes perfusion holes proximal and distal of the widened portion.

28. (Canceled) The device of claim 20, further comprising an externally detectable marker on the elongate member at a predetermined location with respect to the expandable member.

29. (Canceled) The device of claim 20, further comprising a shoulder on the elongate member proximate the expandable member, the shoulder having a blunt distal edge for engaging a proximal end of an expandable stent received on the expandable member to prevent substantial proximal movement of the expandable stent.

30. (Canceled) The device of claim 29, wherein the shoulder includes a substantially tapered proximal edge to facilitate withdrawal of the elongate member from a body passage.

31. (Canceled) A method of implanting a stent within a curved region of a body passage, the stent including a plurality of cylindrical segments and a plurality of connectors extending between adjacent segments, each segment including a circumferential pattern of alternating curvilinear elements, the method comprising the steps of:

placing the stent in a contracted condition on a distal end of a stent delivery device;

advancing the distal end of the stent delivery device along the body passage;

positioning the stent within the curved region;

expanding the stent to an intermediate enlarged condition to substantially eliminate localized radial forces;

expanding the stent further to a final enlarged condition, the circumferential pattern of alternating curvilinear elements expanding substantially evenly about a circumference of the stent to scaffold the curved region; and

withdrawing the stent delivery catheter from the body passage.

32. (Canceled) The method of claim 31, wherein the curved region comprises a channel extending between adjacent blood vessels.

33. (Canceled) The method of claim 32, wherein the adjacent blood vessels comprise a coronary vein and a coronary artery.

34. (Canceled) The method of claim 31, wherein the stent delivery catheter includes a balloon thereon onto which the stent is placed, and wherein the balloon is inflated to expand the stent to the intermediate and final enlarged conditions.

35. (Canceled) The method of claim 34, wherein the balloon is wrapped around the catheter body prior to placing the stent thereon, and wherein the balloon automatically unwraps substantially as it is inflated to expand the stent to the intermediate enlarged condition.

36. (Canceled) The method of claim 31, wherein the connectors include a curve extending partially transversely along the circumference of the stent, and wherein connectors disposed opposite one another about the circumference are axially extended and compressed, respectively, substantially evenly as the stent bends during the step of expanding the stent to the final enlarged condition to scaffold the curved region.

37. (Canceled) A method of implanting a stent across a channel connecting two adjacent blood vessels within a patient's body, the stent including a plurality of cylindrical segments and a plurality of connectors extending between adjacent segments, each segment including a circumferential pattern of alternating curvilinear elements, whereby the stent is plastically deformable between a contracted condition, an intermediate enlarged condition and a final enlarged condition, the method comprising the steps of:

placing the stent in the contracted condition over an expandable member on a distal end of a stent delivery device;

advancing the distal end of the stent delivery device within a first blood vessel until the stent is positioned across the channel;

expanding the stent to the intermediate enlarged condition to substantially eliminate localized radial forces created by the expandable member;

expanding at least a portion of the stent to the final enlarged condition, the portion of the stent expanding substantially evenly about its circumference; and

withdrawing the stent delivery catheter.

38. (Canceled) The method of claim 37, comprising the additional step of placing a guide wire across the channel from one of the two adjacent blood vessels, over which the stent delivery device is advanced and withdrawn.

39. (Canceled) The method of claim 37, wherein the adjacent blood vessels comprise a coronary vein and a coronary artery.

40. (Canceled) The method of claim 37, wherein the circumferential pattern includes a first set of curvilinear elements having a first resistance to expansion, and a second set of curvilinear elements having a second resistance to expansion substantially higher than the first resistance to expansion, and wherein the intermediate enlarged condition is achieved by overcoming the first resistance to expansion, and wherein the final enlarged condition is achieved by overcoming the second resistance to expansion.

41. (Canceled) The method of claim 37, wherein the stent delivery device includes a marker in a predetermined relationship with the stent, and wherein the marker is observed while the stent is positioned across the channel.

42. (Canceled) The method of claim 37, comprising the additional step of creating the channel between the adjacent blood vessels.

43. (Canceled) The method of claim 42, wherein the channel is created by cutting or removing tissue between the adjacent blood vessels.

44. (Canceled) The method of claim 37, comprising the additional step of dilating the channel to a predetermined size.

45. (Canceled) The method of claim 44, wherein the stent delivery device comprises a nose cone on its distal end, and wherein the nose cone dilates the channel when the distal end of the stent delivery device is advanced through the channel.

46. (Canceled) The method of claim 44, wherein an expandable dilation member is advanced into the channel and expanded to dilate the channel to the predetermined size.

47. (Canceled) The method of claim 44, wherein the stent delivery device includes an outer sheath, and wherein an expandable member on the outer sheath is expanded to dilate the channel to the predetermined size.

48. (Canceled) A method of delivering an expandable stent to a selected delivery site within a patient's body using a stent delivery device that includes an elongate member having an expandable member and a nose cone on its distal end, and an outer sheath for slidably receiving the elongate member therein, the method comprising the steps of:

placing a stent in a contracted condition on the expandable member;

inserting the elongate member into the outer sheath to cover the stent, the outer sheath engaging the nose cone to provide a substantially smooth transition therebetween;

advancing the distal end of the elongate member along a body passage within the patient's body;

positioning the stent at the selected delivery site;

withdrawing the outer sheath proximally to expose the stent at the selected delivery site;

expanding the stent to an enlarged condition with the expandable member; and

withdrawing the elongate member from the patient's body.

49. (Canceled) The method of claim 48, wherein the elongate member includes a shoulder proximate the expandable member for preventing substantial proximal movement of the stent received thereon.

50. (Canceled) The method of claim 48, wherein the body passage comprises a vein, and wherein the selected delivery site comprises a channel connecting the vein to an adjacent artery.

51. (Canceled) The method of claim 50, wherein the nose cone at least partially dilates the channel when the distal end of the catheter body is advanced therethrough.

52. (Canceled) The method of claim 50, wherein the outer sheath includes perfusion holes therethrough to allow continued flow of blood along the artery when the stent is positioned at the selected delivery site.

53. (Canceled) The method of claim 50, wherein the nose cone includes perfusion holes therethrough to allow continued flow of blood along the artery when the stent is positioned at the selected delivery site.

54. (Canceled) The method of claim 48, wherein the stent delivery device includes an externally observable marker, and wherein the marker is observed when the stent is positioned at the selected delivery site.

55. (Canceled) The method of claim 48, further comprising the step of dilating the selected delivery site with an expandable member on the outer sheath.

56. (Canceled) The method of claim 48, wherein the outer sheath includes an outer protrusion, and wherein the protrusion produces a tactile indication when the stent is positioned at the selected delivery site.